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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,014	01/23/2004	Joseph S. Colburn	GP-302990	8960

7590 04/19/2005

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EXAMINER
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VY, HUNG T

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/764,014

Applicant(s)

COLBURN ET AL.

Examiner

Hung T. Vy

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/23/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### Acknowledges

1. Receipt is acknowledged of the following items from the Applicant.

Information Disclosure Statement (IDS) filed on 01/23/2004. The references cited on the PTOL 1449 form have been considered.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-4, 7-10, 12-15 and 18-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Tang et al., U.S. pub. No. 2004/0212535.

Claims 1 and 12, Tang et al. disclose a low-profile dual-band antenna and a method for producing a low-profile dual-band antenna, comprising a ground plane; a low-profile dual-band antenna, comprising: an "E"-shaped metal plate 21 that is located a first distance from said ground plane and that includes first and second outer extensions and an inner extension of said metal plate (see fig. 2); a feed tab that connects said inner extension and said ground plane (See fig. 2), first and second parallel slots are symmetrically disposed about a center point of metal plate (see fig. 2), a shorting tab 22 that connects inner extension and ground plane (see fig. 2 and 8). Further, with the same "E" shaped structure (see fig. 2) so a low-profile dual band antenna will provide the same function as low-profile dual-band antenna communicates first radio frequency (RF) signals in first band and second signals in a second RF band.

Claims 2-4, Tang et al. disclose the same "E" shape structure so the low-profile dual-band antenna will provide the same function as first RF signals and said second RF band and second RF signals in a second RF band (see fig. 2), a radiation pattern that is omnidirectional in the azimuth plane and vertically polarized in a horizontal plane when communicating said first RF signals and said second RF signal (See fig. 2) and first and second band can be independently tuned.

Claims 7-8, Tang et al. disclose a length of said radiation determines resonant frequency of said antenna (see paragraph 0029-0030).

Claims 9-10, Tang et al. disclose a low-profile dual-band antenna is fed by a cable 23 with a first conductor and second conductor, said first conductor connects to

said inner extension, and second conductor connects to said ground plane (See fig. 2 and fig. 8).

Claims 13-15 and 18-22, the methods for producing a low-profile dual-band antenna, since Tang et al. disclose the product, it is inherent a product by process for performing the method is recited in the claims.

### **Claim Rejections - 35 U.S.C. § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-6, 11 and 16-17 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Tang et al., U.S. pub. No. 2004/0212535 in view of Hung et al., U.S. Patent No. 6,864,842.

Claims 5-6, 11 and 16-17, Tang et al. disclose all limitations of claimed invention except for using in mobile phone band or PCS band. However, Hung et al. disclose for using in mobile phone band and PCS band (See column 1, line 4-5). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Tang et al. to have mobile band and PCS band as taught by Hung et al. The motivation for doing so would have been to provide mobile band and PCS band in order to use in different device.

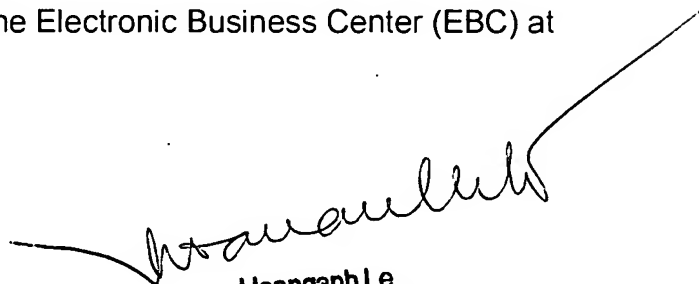
### Conclusion

5. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (571) 272-1954. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 308-7722 for After Final communications.

Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either private Pair or Public Pair. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hung T. Vy  
Art Unit 2828  
April 12, 2005.



Hoanganh Le  
Primary Examiner